

## CLAIMS

1. (Amended) A network relay device connected to a first communications network and a second communications network with which said device can transmit data after securing a channel band, said device including a first network interface where said device is connected to the first communications network and a second network interface where said device is connected to the second communications network,

said device comprising:

an event/state detecting section for detecting an event and/or a state regarding the first communications network via the first network interface;

a communications resource determination section for determining a channel band to be obtained, changed, or released in the second communications network, in accordance with the event and/or the state, regarding the first communications network, detected by the event/state detecting section; and

a communications resource management section for obtaining, changing, or releasing a channel band in the second communications network via the second network interface on the basis of the channel band calculated by the communications resource determination section.

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2. (Amended) The network relay device according to claim 1, wherein:

the first communications network is a communications network with which said device can transmit data after securing a channel band, and

the event and/or the state, regarding the first communications network, detected by the event/state detecting section is obtaining, change, or release of a channel band in the first communications network, or a channel band obtaining state, for data to be transferred between the first communications network and the second communications network.

3. The network relay device according to claim 1, wherein:

the event and/or the state, regarding the first communications network, detected by the event/state detecting section is reception or completed reception of data itself to be transferred from the first communications network to the second communications network.

4. (Amended) The network relay device according to any one of claims 1 through 3, wherein:

the communications resource determination section

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calculates, on a channel band obtained by measurement of data group received from the first communications network, a band required for communications of the data group in the second communications network.

5. (Amended) The network relay device according to any one of claims 1 through 3, wherein:

the first communications network is a communications network with which said device can transmit data after securing a channel band, and

the communications resource determination section calculates a channel band in the second communications network, on the basis of a channel band obtained, changed, or released in the first communications network.

6. (Amended) The network relay device according to claim 5, wherein:

the communications resource determination section estimates a bandwidth of data transmitted through the channel band obtained, changed, or released in the first communications network, and then calculates the channel band in the second communications network on the basis of the estimated bandwidth.

7. (Amended) The network relay device according to any

one of claims 1 through 6, wherein:

the communications resource determination section calculates the channel band to be secured in the second communications network, with consideration of a property of the second communications network.

8. (Amended) The network relay device according to claim 7, wherein:

the communications resource determination section calculates a channel band to be secured in the second communications network, on the basis of (i) a channel band required for normal data transmission in the second communications network and (ii) a channel band required for data retransmission.

9. (Amended) The network relay device according to any one of claims 1 through 8, further comprising:

a communications state detecting section for detecting a communications state in the second communications network,  
wherein:

the communications resource management section changes the channel band having been obtained in the second communications network, in accordance with a change in communications state of a band-obtained data in the second communications network.

10. (Amended) The network relay device according to claim 9, wherein:

the communications state detecting section detects an error rate of data transmission in the second communications network, and if the error rate exceed a given value, the communications resource management section increases a channel band having been obtained in the second communications network.

11. (Amended) The network relay device according to claim 9 or 10, wherein:

the communications state detecting section detects a data communications time in the second communications network, and as a result of comparison between the data communications time and a time given by an already allocated channel band, the communications resource management section changes the channel band obtained in the second communications network.

12. (Amended) The network relay device according to any one of claims 1 through 11, comprising:

a network management section for detecting a communications resource management station which manages a channel band in the second communications network,

wherein:

from which communications station on the second communications network serves as the communications resource management station, detected by the network management section, the communications resource management section judges whether said network relay device is to obtain, change, or release a channel band or is to request other communications station on the second communications network to obtain, change, or release a channel band.

13. The network relay device according to any one of claims 1 through 12, wherein:

the event/state detecting section receives information on network state from other communications device connected to the first network.

14. The network relay device according to any one of claims 1 through 12, wherein:

the event/state detecting section requests information on network state to other communications device connected to the first network.

15. The network relay device according to claim 14, wherein:

the event/state detecting section checks a network state in the first communications network at regular intervals.

16. The network relay device according to claim 13, wherein:

the event/state detecting section checks a network state in the first communications network upon receipt of notification of a predetermined event from the first communications network.

17. (Amended) The network relay device according to any one of claims 1 through 16, wherein:

the communications resource management section obtains, changes, or releases a channel band in the second communications network, after a lapse of a given time from detection of a network state in the first communications network.

18. (Amended) The network relay device according to any one of claims 13 through 17, wherein:

the event/state detecting section detects, as the network state in the first communications network, presence or absence of other entity which communicates data with said device in the first communications network.

19. (Amended) The network relay device according to any one of claims 13 through 17, wherein:

the event/state detecting section detects, as the network state in the first communications network, a connection established state in the first communications network.

20. (Amended) A network relay device, connected to (i) a first communications network with which said device can transmit data after securing a communications resource and (ii) a second communications network having a property which is different from that of the first communications network, said device including a first network interface where said device is connected to the first communications network and a second network interface where said device is connected to the second communications network,

said device comprising:

a network component to which other communications station connected to the first communications network makes access so as to secure a channel band on the first communications network; and

a connection management section for controlling availability/unavailability of the network component.

21. (Amended) The network relay device according to claim 20, wherein:

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the connection management section, upon receipt of a connection cut-off request or a band release request regarding a connection or band having been set on the first communications network, disables the network component, on said network relay device, associated with the connection or the band.

22. The network relay device according to any one of claims 1 through 21, wherein:

the first communications network or the second communications network is in conformity with IEEE1394.

23. The network relay device according to any one of claims 1 through 21, wherein:

the first communications network or the second communications network is a wireless network.

24. The network relay device according to claim 16, wherein:

the first communications network is in conformity with IEEE1394, and

an event notified from the first communications network is a bus reset defined by the IEEE1394.

25. (Amended) The network relay device according to

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claim 2, wherein:

the first communications network is in conformity with IEEE1394, and

as a state of obtaining a channel band in the first communications network, used is a value of BANDWIDTH\_AVAILABLE or CHANNELS\_AVAILABLE register held by an Isochronous Resource Manager in the first communications network.

26. The network relay device according to claim 19, wherein:

the first communications network is in conformity with IEEE1394, and

as the connection established state in the first communications network, used is a connection counter value of a Plug Control Register held by a data transmitting station or data receiving station in the first communications network.

27. The network relay device according to claim 20 or 21, wherein:

the network component is any one of a register, a Plug Control Register, and a 1394 node.

28. A network relay program causing a computer to execute an operation of the network relay device according to

any one of claims 1 through 27.

29. A storage medium containing a network relay program causing a computer to execute an operation of the network relay device according to any one of claims 1 through 27.

30. (New) The network relay device according to claim 21, wherein:

resetting a structure of the first network is further carried out.

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